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8 Attorneys-In-Fact/ Agents and Representatives for Applicants

9 UNITED STATES OF AMERICA  
10 UNITED STATES DEPARTMENT OF COMMERCE  
11 UNITED STATES PATENT AND TRADEMARK OFFICE

12 Title 35 U. S. C.

13 Christopher Redwine, President  
14 Matthew Schoenfeld, President  
15 Of Twilight Golf Balls, LLC.  
16 236 South Sycamore Avenue, #1  
17 Los Angeles, Ca. 90036

18 Applicants

19 To:

20 Alvin Hunter, Examiner  
21 Art Unit: #3711  
22 UNITED STATES PATENT AND  
23 TRADEMARKS OFFICE  
24 Commissioner of Patents and Trademarks  
25 Washington, DC. 20231

Application No. 09/927,035

RESPONSE TO OFFICE ACTION  
SUMMARY/OPPOSITION  
PERFORMED ON APRIL 12, 2002 BY  
EXAMINER ALVIN HUNTER.

CONFIRMATION NUMBER: 4728

26 Applicants Matthew Schoenfeld, Christopher Redwine and Twilight Golf Balls, a  
27 California domestic limited liability company (Collectively: "Applicants"), do hereby respond,  
28 by and through their Agents, Representatives and Attorneys-In-fact known as Anderson, Philips,  
Davis & Hoffmann, LP. , Misters R. A. Anderson and/or Elmer Davis, Jr. (Collectively:  
"Anderson-Philips") to an Office Action Summary (Hereinafter: "Summary") as prepared by  
Alvin Hunter, examiner with the United States Of America, United States Patent and Trademark  
Office (hereinafter: "USPTO") dated April 12, 2002. Said Summary is also known as: Form No.  
PTO-326 [rev. 04-01];

RESPONSE

TECHNOLOGY CENTER R3700

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4 att  
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11/1/02  
Lanti

1 WHEREAS, Applicants pray for any and all extensions under 35 U.S.C. §133; 37 CFR  
2 1.136 (a), based upon the following:

3 1. Applicants received Summary on or about April 22, 2002, at 236 South Sycamore  
4 Avenue, #1, Los Angeles, ca. 90036; with attention to Christopher Redwine;

5 2. On or About November 20, 2001, Applicant engaged the firm of Anderson,  
6 Philips, Davis & Hoffmann, LP. as their attorneys-in-fact, agents and representatives to receive,  
7 communicate, prosecute and in full substitution of itself; and to eventually receive a Certificate  
8 of Registration by means of having filed a specific Power of Attorney with the USPTO;

9 3. That on or before November 22, 2001, Anderson-Philips did deposit said Power  
10 of Attorney, in the U. S. Mail, to the USPTO with notification to amend mailing address and  
11 representatives, agent or attorneys-in-fact for and of record with the USPTO's offices in  
12 Washington, DC.

13 ~~4.~~ That the USPTO misplaced or lost said Power of Attorney and notice of  
14 substitution of agent, attorneys-in-fact and therefore is hereby asked to permit this Response to  
15 be accepted as though it were more timely filed with the office of the USPTO;

16 Now therefore, in Response to the Office Action Summary, the applicants and their  
17 agents, representatives and attorneys-in-fact, do hereby offer the following;

18  
19 **OFFICE ACTION SUMMARY OBJECTIONS**

20 The Summary does purport specification objections by the Examiner on the following  
21 basis of the Detailed Action Section:

22  
23 1. The Abstract of Disclosure ["Disclosure"] is objected to because the abstract is  
24 headed with the name of the invention above it. The only heading that should appear per MPEP  
25 §601.01 (g) is "Abstract". -Correction required

26 2. The Disclosure is [further] objected to because of the following informalities: On  
27 page 5, lines 5 and 6 of the description of 2A and 2B, the word "innercore shell" should read  
28 "inner core shell"- Correction Required

1  
2 **CLAIM REJECTION UNDER 35 U.S.C. § 112 AND §102**  
3

4 1(a). Claim 1 is [was] rejected under U.S.C. § 112 as being indefinite for failing to  
5 particularly point out and distinctly claim the subject matter which applicant regards as the  
6 invention. {Excerpt};

7 2(b). Claim 1 also recites [recited], in line 2 "an outer layer or layers", in line 9, "a  
8 membrane, partition, chambers or capsule" and in line 12, a means to break, tear, open or  
9 otherwise affect said membrane. Is applicant saying that there is more than one outer layer? Is  
10 the applicant claiming more than one way to activate invention? Therefore, claim 1 is render  
11 indefinite.

12 3(c) Claim 1 is [was] rejected under 35 U.S.C. §102(b) as being anticipated by  
13 Newcomb et. al. (USPN 4695055)  
14

15 **CORRECTION TO OFFICE ACTION SUMMARY**  
16

17 1. Applicants through their agents/common representatives and attorneys-in-fact,  
18 hereby offer Exhibit "A" included with this Response, as answers to the foregoing Objections  
19 within the Office Action Summary;

20 2. Original filing of application number 09/927,035 is hereby modified by figured  
21 drawings attached within Exhibit "A" for consideration, clarification and better illustration of  
22 patent being sought for approval by applicants;

23 3. Applicants hereby incorporate a Foreign Patent filing with this Response on form  
24 PCT/RO/101 for consideration with the initial filing of application, for incorporation and  
25 consideration to pending application for patent;

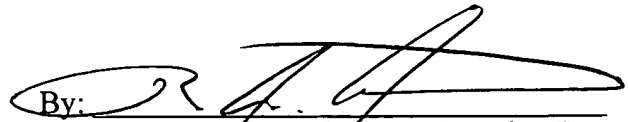
26 4. Applicants hereby seek approval of submitted materials for application number  
27 09/927,035 and the related foreign filing application from USPTO by its Response and  
28 compliance with the objections noted in the Office Action Summary to their initial filing.

1  
2  
3 WHEREFORE, applicants respectfully request that approval be granted in their favor and  
4 proceed to review and approval of their foreign filing either jointly and severally.

5 DATED:

6 September 17, 2002

ANDERSON, PHILIPS, DAVIS & HOFFMANN,  
LP.

7  
8 By: 

9 Mr. R. A. Anderson, Managing Partner  
10 Attorneys-In-fact/Agents and Common  
11 Representatives for Applicants:  
12 Christopher Redwine and Matthew  
13 Schoenfeld and Twilight Golf Balls, LLC.  
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## **DESCRIPTION – FIG. 1 – EMBODIMENT**

The embodiment of the chemiluminescent golf ball of the present is illustrated in FIG. 1 (cross section). The golf ball is comprised of (1) an outer layer of translucent polymer material common to golf ball construction, (2) an inner core shell, also of translucent polymer material; encapsulating (3) chemiluminescent liquid component A, (4) a breakable partition of glass or brittle plastic, and (5) chemiluminescent liquid component B.

## **DESCRIPTION - FIG 2a and 2b – EMBODIMENT**

The embodiment of the chemiluminescent golf ball of the present invention is illustrated in FIG 2a (cut-away view), and FIG 2b (cut-away view), before and after activation.

The components of the chemiluminescent liquid (6 and 8) are held separate by a partition (7), all of which are encapsulated within the inner core shell (9). An outer layer (13) of translucent polymer material commonly used in golf ball construction wholly encapsulates the core.

The embodiment of the chemiluminescent golf ball illustrated in FIG 2b (cut-away view), shows the ball when sufficient external force is applied. So as to compresses the ball, and rupture the partition (12), thereby allowing the chemiluminescent liquid components, A and B, to mix (11), creating light, which is transmitted through the outer layer (13).

## **OPERATION**

The manner of using the present invention is by the application of external force, (e.g. striking the golf ball with a golf club), sufficient to cause the golf ball to compress and the partition within the core to rupture, and allow the chemiluminescent liquid components to mix and create the active chemiluminescent liquid mixture. When activated, the golf ball of this invention is luminescent and more clearly visible to the eye in low light conditions, as well as having properties of spin, distance, and flight characteristics similar to standard golf balls.



Patent Application of  
Twilight Golf Balls LLC  
For

**TITLE:        ABSTRACT**

**CROSS REFERENCE TO RELATED APPLICATIONS**

Not applicable.

**FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT**

This invention is not in any way involved with Federally sponsored research or development.

**FIELD OF INVENTION**

This invention pertains to a luminescent or illuminated golf ball, having an encapsulated chemiluminescent lighting device, for evening and nighttime use, and to be made more visible in low light conditions.

**BACKGROUND OF INVENTION AND PRIOR ART**

As any golfer knows, it is typical for golf courses to remain open and for play to continue as long as there is sufficient daylight. Most courses also have special rates for twilight play, as it is understood that the golfer must try to finish a round as daylight is running out, and may not be able to finish at all as it can become too dark to play before the round can be finished. Under such conditions, a golf ball, which is slightly more than one and half inches across, can be very difficult to see at a distance and the possibility of losing a ball in the course of play is greatly increased.

Prior art attempts to overcome this problem have included several variations, making use of different light sources, such as electric lighting elements, lightsticks, as well as attempts in which photostorage material is mixed into the ball's cover material.

## **OPERATION**

The manner of using the present invention is by the means of activation by applying an external force (e.g. striking the ball with a golf club) sufficient to cause the partitioning element encapsulated within to rupture so as to mix chemiluminescent compositions A and B and create the active chemiluminescent mixture. When activated, the golf ball of this invention is luminescent and more clearly visible to the eye in low light conditions, as well as having variable properties of spin, distance, and flight characteristics similar to standard golf balls.

## **CONCLUSION AND RAMIFICATIONS**

Accordingly, the reader will see that the luminescent golf ball of this invention can be of great use to golfers seeking to finish a round of golf at twilight, play at night, or in other low light conditions as their ball would be made more visible and less susceptible to being lost in darkness or shadows. The present invention also allows for storage for long periods of time prior to use, and can be activated easily and quickly to be made ready for use. Also, because of substantially even weight distribution of the self contained lighting source, the present invention can be made to perform similarly to standard, non-luminescent golf balls, thus, and not sacrificing ball performance.

Although the description above contains much specificity, these should not be construed as limiting the scope of the invention, but merely providing illustrations of some of the presently preferred embodiments of this invention. For example the partitioning element can have a variety of different shapes and be positioned in a number of different ways.

## **CLAIMS:**

We claim:

- 1) A spherical, chemiluminescent golf ball comprising:
  - a) an outer layer of translucent polymer material allowing for transmission and diffusion of light;;
  - b) a substantially spherical inner chamber containing two components of a chemiluminescent mixture and;
  - c) a partitioning element, separating said components of chemiluminescent mixture, which when sufficient external force is applied to the invention, will rupture thereby allowing said chemiluminescent components to mix, and produce light energy;
  - d) A wholly encapsulated inner core shell housing said components of which cause the illumination of the invention;

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The manner of using the present invention is by the means of activation by applying an external force (e.g. striking the ball with a golf club) sufficient to cause the partitioning element encapsulated within to rupture so as to mix chemiluminescent compositions A and B and create the active chemiluminescent mixture. When activated, the golf ball of this invention is luminescent and more clearly visible to the eye in low light conditions, as well as having variable properties of spin, distance, and flight characteristics similar to standard golf balls.

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  - c) a partitioning element, separating said components of chemiluminescent mixture, which when sufficient external force is applied to the invention, will rupture thereby allowing said chemiluminescent components to mix, and produce light energy;
  - d) A wholly encapsulated inner core shell housing said components of which cause the illumination of the invention;



## **CHANGES FOR CHEMILUMINESCENT GOLF BALL:**

### **SUMMARY OF INVENTION**

The present invention utilizes a chemiluminescent liquid mixture within the spherical core of the golf ball. The core is enclosed within an outer layer of translucent polymer material commonly used in standard golf ball construction. The chemiluminescent liquid is comprised of two component liquids, separated within the core by a breakable partition, encapsulated within a spherical inner core of a golf ball. Activation of the chemiluminescent components occurs when sufficient external force is applied to the ball to deform the ball and rupture the partition, allowing the chemiluminescent components to mix and create light. The activated liquid will transmit light through the outer translucent layer so as to allow the golf ball to be seen at a distance in low light conditions for a matter of hours, allowing for continued play in twilight or at night.

The uniqueness of this invention is that it is self contained and does not require the use of any additional components or tools, besides applied force to the outside of the ball, and in all other respects will perform like a standard golf ball.

### **BRIEF DESCRIPTION OF THE DRAWING FIGURES**

FIG. 1 - shows a cross section of the chemiluminescent golf ball.

FIG. 2a - shows a cut-away view of the chemiluminescent golf ball.

FIG. 2b - shows a cutaway view of the chemiluminescent golf ball as deformed by the application of external force sufficient to rupture the partition (partition ruptured, chemiluminescent liquids mixed and activated).

### **REFERENCE NUMERALS IN DRAWINGS**

- |    |                                     |
|----|-------------------------------------|
| 1  | Outer translucent layer             |
| 2  | Inner core shell                    |
| 3  | Chemiluminescent liquid component A |
| 4  | Partition                           |
| 5  | Chemiluminescent liquid component B |
| 6  | Chemiluminescent liquid component A |
| 7  | Partition                           |
| 8  | Chemiluminescent liquid component B |
| 9  | Inner core shell                    |
| 10 | Outer Translucent layer             |
| 11 | Chemiluminescent liquid mixture     |
| 12 | Ruptured partition                  |
| 13 | Outer translucent layer             |

## ABJECTIONS TO LIKENESS OF NEWCOMB, ET. AL. BALL [USPN 4695055]

This invention greatly differs from the Newcomb ball (See Revised Figures) by many factors or methods. First, there is no second or external element {a "stick"} as is present in USPN 4695055. This invention is self-contained, requiring no external apparatus to cause its illumination other than an external force applied to rupture the encapsulated chemical components. This is an extremely key factor in the difference to Newcomb, et. al.'s invention.

Further, there is no **reusable stick** or puncturing affect, *through* the ball to cause illumination thereof. This is quite prevalent in the Newcomb, et. al.'s invention, in order for the product to be engaged. Lastly, this golf ball's illumination is cause by rupturing the chemiluminescent product contained inside of it.

Newcomb, et. al.'s ball contains NO chemiluminescent chemicals *within the ball itself*. Newcomb, et. al.'s ball is simply a fluorescent ball which illuminates by insertion of an object ("stick") to cause its effects to take place. Without the external ("lighting stick"), Newcomb, et. al.'s ball is without illumination affect or ability.

The distinctions between this invention abstract and Newcomb, et. al. are substantially and remarkably different concepts, features, construction and styles. There is truly no real comparison on any basis for the two golf balls.